ABSTRACT

[Problems] A detector for detecting a different kind of object among objects being carried with high resolution using a plane spectrometer [[.]]irradiates [Means for solving problems] In the present invention, a conveyer means (11), an irradiating means (4) of a near-infrared ray and performs , a plane spectroscopic means (2) for performing plane spectroscopy for a reflected light. The detector also detects , an imaging means (3), and an analyzing means (5) for detecting a different kind of object using a main component analyzing method obtaining spectral data of the reflected light and performs are provided, and the aforementioned analyzing means (5) performs a preprocessing for averaging and standardizing the aforementioned spectral data. Then , a wavelength axis averaging, processing, an interpolation processing for performing Lagrangian interpolation and , a measuring position optimization processing, a spatial axis averaging are performed. processing, a conversion processing Conversion of first–order/second-order differentiation, and a smoothing and , a main component score calculation processing for calculating calculation of the main component score on the basis of previously obtained loading vector data is also performed. Then , and a determination processing for performing judgment of [[the]] a different kind of object is performed.

[Selected Figure] Fig. 1